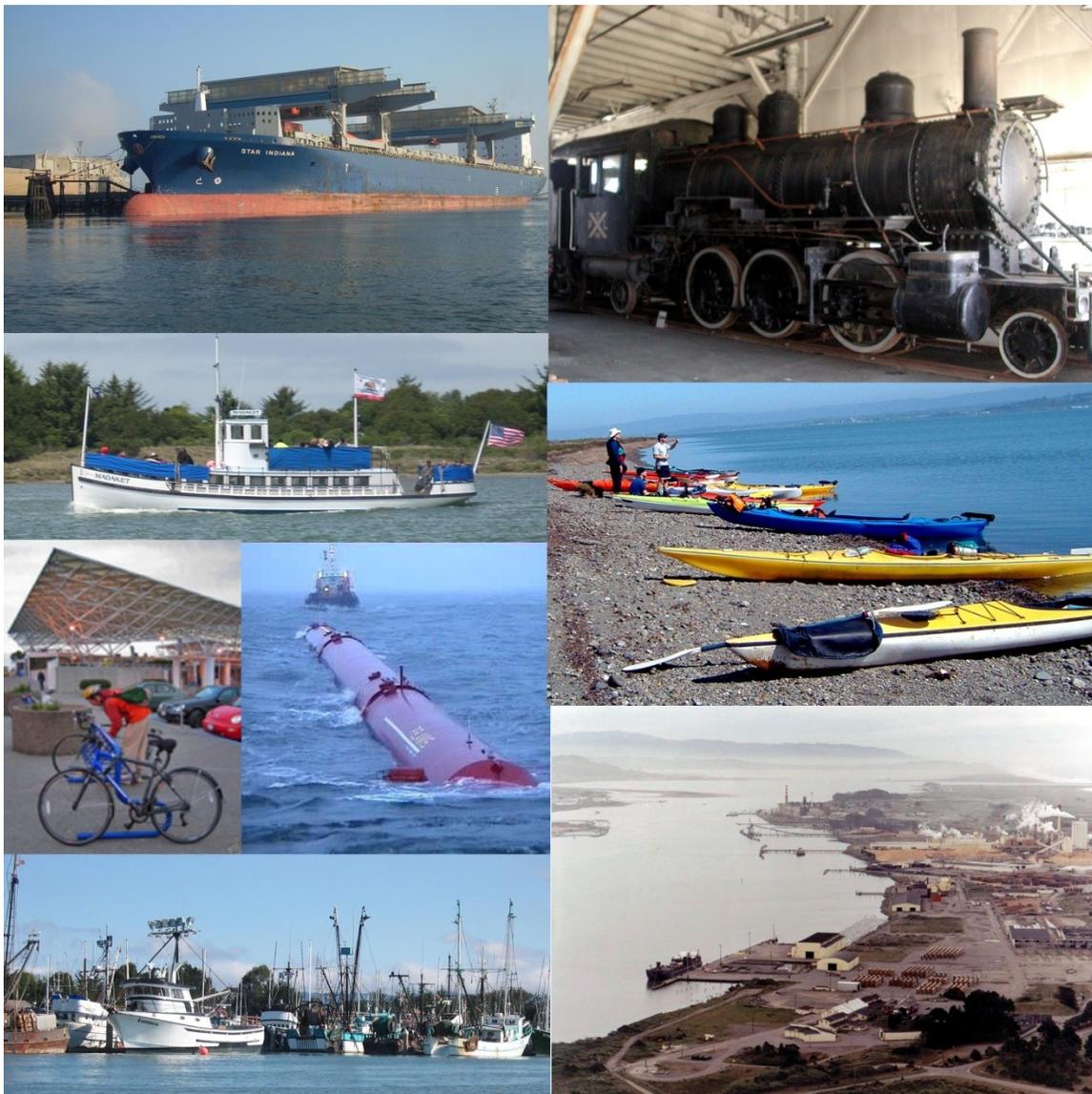


Final
**Humboldt Bay Harbor, Recreation and Conservation District
Economic Development Committee**

**Prioritization of Potential Policies and Actions for
Economic Development of Humboldt Bay**

May-October 2009



Compiled by Commissioner Patrick Higgins

June 2010

Acknowledgements

The Humboldt Bay Harbor, Recreation and Conservation District Commission would like to thank all the Economic Development Committee members who took time out of their busy lives to come together and help us understand what options are available for us to stimulate the economy of the bay. Presenters brought their passion and enthusiasm and explained practical yet exciting prospects for job development. Private business interests that typically are very guarded, in order to avoid providing information to competitors, were very candid and open in sharing their knowledge to the tremendous benefit of the group. The meetings were sometimes well attended by the public and their courtesy and goodwill added to a non-confrontational tone of forums that allowed a full exchange of ideas. Although Commissioner Higgins assembled this report, additional contributors and editors are Commissioner Mike Wilson, Chief Executive Officer David Hull, Ted Kuiper and Stephen Pepper of Humboldt Logistics.

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Prioritization of Potential Policies and Actions for Economic Development of Humboldt Bay

The *Revitalization Plan*, *Humboldt Bay Management Plan* and *Strategic Plan* documents list many options for the Harbor District to pursue, but do not provide prioritization. As a result there has been some lack of focus and action on some sound ideas for economic development and bay improvements recommended in previous studies. And there are some newer opportunities that have surfaced as part of this recent effort. This section attempts to provide a ranking and proposes action to delegate assignments to existing committees, form new ones or to make some items a priority for commission and staff action. It is hoped that follow up on these items will improve the likelihood that the Economic Development Committee recommendations are implemented and successful.

It should be noted that not all recommended actions in this document need to, or should be district led. In many cases it is more appropriate for the district to take an active supporting role.

While some findings are related directly to harbor and industrial business development to increase revenues, the Harbor District may also generate revenue through conservation and recreation activities directly through administrative overhead. In aggregate, conservation and recreation projects may also have significant indirect economic benefits to the district as well as the community at large as discussed in various forums covered above. At the final April 28, 2010 meeting, it was pointed out that lower priority actions could still be embraced and enacted by the Harbor District, if citizens or groups follow up on them with volunteer energy or grant opportunities are available. (i.e. Paddlefest).

I. Short Sea Shipping or Marine Highway Development

The findings of the Economic Development Committee did not deduce that any near-term prospect for an increase in overseas cargo shipping other than for the pulp mill and some potential timber export, but there was general agreement that short sea shipping has a potentially significant upside potential in the not too distant future. It is believed that there will be a trend toward shipping goods by sea along the West Coast to replace up to 10,000 trucks on Interstate 5 and this is supported by new federal programs and rhetoric. This transition to the Marine Highway is promoted in part to improve the air quality and highway safety in the valleys of California, Oregon, and Washington and bring significant benefits in terms of fighting global climate change. There are two ventures currently under consideration by the Harbor District with regard to the Marine Highway, the Humboldt Logistics approach using tugs and barges and the Santa Maria Shipowning and Trading small ship approach. The latter includes fabrication of ships at the Harbor District's Fields Landing site.

Humboldt Logistics: There is already substantial action on the tug and barge Marine Highway approach due to a cooperative working relationship between Humboldt Logistics and Harbor District staff. The District will sponsor a mid-June 2010 TIGER planning grant application for \$1 million that will confirm trade potential and create a barge design for envisioned short sea shipping. In August 2010, the Harbor District is planning on co-sponsoring a TIGER II grant for implementation that would include purchase of a \$24 million barge that the District would own and that would produce revenue annually.

Santa Maria Shipowning and Trading: This proposal envisions conversion of the Harbor District's Fields Landing property into a ship building facility that would construct high fuel efficiency, diesel-electric ships of Dutch design that would carry a few hundred containers each. The ship yard and dry dock proposed would be enclosed so that work could continue in winter and potential for water pollution, therefore, greatly lessened. The Harbor District already has a permit to pull old creosote pilings at the site and a small dock in the foot print of the old one would allow ships constructed in the dry dock for installation of electronics and other finish work.

A ship yard might attract related businesses to adjacent properties and consequently have additional economic development benefits. The potential for a small, green transit hub at the location might also be considered. Santa Maria Shipowning and Trading do not wish to compete in the near term for TIGER I and II grants, but still have long-term interest. They are, however, interested in building community interest and support with the ultimate objective of pursuing this venture in future grant rounds or any stimulus funding opportunity.

Action

1. File TIGER grant in cooperation with Humboldt Logistics in June 2010 for Marine Highway planning
2. File TIGER II implementation grant in August 2010 for purchase of a barge suitable for short sea shipping in cooperation with Humboldt Logistics
3. Economic Development Committee should help convene a public meeting to discuss short sea shipping options in detail and to inform and involve the community so they know the nature and potential impacts of Marine Highway development
4. Create an ad hoc workgroup with interested short sea shipping businesses and exporter/importers to identify onshore and dock infrastructure and location needs with an eye towards practicality, feasibility and fundability.

II. Aquaculture Expansion

There are a number of options to be considered in the aquaculture industry cluster that range from expansion of existing oyster culture, to algae culture for energy or use of excess freshwater from the Humboldt Bay Municipal Water District. Areas for expansion include in bay, shore-side, and on shore. Significant interest has been shown from existing business from the area as well as out of the area for all of these opportunities. There currently exists a large amount of business momentum, intellectual capital and interest in this type of business venture in Humboldt Bay region.

Expand Oyster Culture in Bay: Recently students from Dr. Yvonne Everett's natural resource planning class at Humboldt State University recently identified the additional areas for potential oyster aquaculture expansion within Humboldt Bay. Obtaining permits for such expansion currently is prohibitive in cost and Harbor District staff or consultants should examine ways to answer agency concerns and help this type of business to expand. The Gulf of Mexico oil spill means that there will be increased demand for Humboldt Bay oysters that could make the business more lucrative for small business people and possibly increase (possibly double) lease revenues for the Harbor District.

Expand Shore-side Aquaculture on Samoa Peninsula (i.e. Redwood Dock): As a result of the Economic Development Committee fisheries and aquaculture forum, the Harbor District was able to attract the interest of the Taylor Brothers Shellfish Company, who have negotiated a first right of refusal to install floating docks for oyster culture. There is interest in expanding shore-side facilities at the Redwood Dock, if appropriate, for producing oyster seed (or spats). Since Humboldt Bay is certified as disease free, these oyster spats can be supplied to others in the industry up and down the West Coast and even internationally. With modest infrastructure improvements shore-side facilities could be implemented on much of the Samoa Peninsula as well as in the Fields Landing area. These facilities can be highly productive and generate significant leasing opportunities for the district.

Aquaculture Park and/or Onshore Aquaculture: The potential for an aquaculture park on the Samoa Peninsula is supported by the presence of substantial raw flat land, access to clean salt water and raw freshwater, reasonably priced power and potential ocean outfall. Salt water aquaculture could provide opportunities to produce many different species (i.e. geoduck clams, mussels, abalone, sea urchin). Freshwater could be used for fin fish culture, such as trout farming. There is a sharp increase in interest and technology related to use of algae aquaculture for biofuels that could have potential applications in an aquaculture park. Exploring synergy between aquaculture ventures, such as using the tailwater from fin fish culture for growing algae, might be considered to both reduce waste and generate an additional product. Fields Landing also has potential for this type of business venture.

Action

1. Create an aquaculture committee of interested parties to help guide the district on how we can expand the aquaculture industry in Humboldt Bay
 - a. Explore potential funding mechanisms for the development of an aquaculture business park/incubator.
 - b. Examine how onshore freshwater aquaculture might be expanded using raw HBMWD water (i.e. freshwater fin fish, algae)
 - c. Determine to what degree in-bay aquaculture can be expanded in an environmentally sound way.
2. Continue to work with Taylor Brothers Shellfish Company on floating dock project and possible shore-side development.
3. Have staff define an approach to permitting that allows prudent expansion of oyster culture.
4. Consider aquaculture park as a considered alternative land use option at Redwood Dock

III. Light to Medium Industrial Development

After the forum on industrial development around the Humboldt Bay covered potential for creation of light to medium industry similar in concept to the Alder Grove Business Incubator in Arcata but with a strong maritime interface. Culminating discussions at the final committee meeting examined this as potentially a compatible use of the Redwood Dock with potential to create 300-400 jobs. This scale of development may be more compatible with the new Samoa Town Plan and quality of life in that community. Furthermore, a business incubator park can have pleasing architecture and landscaping and would better complement development of an historic museum and the adjacent Samoa Cookhouse. Although there are other locations around Humboldt Bay suitable for a business incubator type park, the Redwood Dock is a suitable site. The goal is to encourage industrial activity that would eventually generate goods in sufficient quantities suitable for export via the bay.

Business incubators can target various economic sectors and those touched on included maritime businesses, wood products, alternative energy (i.e. wind and wave), Marine Highway goods trans-shipping, light manufacturing and aquaculture and would be benefited by an adjacent a multi-purpose dock facility. Other compatible uses for the Redwood Dock property include the Timber Heritage Society museum and historic train that are discussed elsewhere.

Action

1. Harbor District Commission should expand its evaluation of potential for uses for Redwood Marine Terminal site and should move forward based on feasibility based on current economic factors and business opportunities.
2. Harbor District Commission should consider updating the duties and possibly title of the Maritime Commerce Director position to have a broader Economic Development focus with the charge of working with county and regional economic development professionals and businesses to examine diverse options for the Redwood Dock as well as assisting all bay side commercial and industrial properties to be productive and develop wisely.
3. Economic Development Director should to the Commission quarterly on which prospects for economic expansion have the greatest substance and chance of success and provide an updated plan of action.

IV. Coordinate a Comprehensive Approach to Humboldt Bay Development

Often economic opportunity is hampered by outdated land use designations and requirements that do not reflect significant changes in the regional and global economies or new and unforeseen opportunities. Harbor District could take a more active role to help coordinate an assessment of assigned land uses surrounding Humboldt Bay permit processes in order to help to facilitate appropriate development. The Economic Development Committee recommends the creation of a committee to promote active coordination with county's economic development and planning staff, area businesses and the Humboldt Bay Management Plan Committee towards a comprehensive land use plan that will address the commercial shipping, industrial development, recreational and conservation values of Humboldt Bay. This was basically a recommendation of the 2005 Revitalization Plan that still needs to be implemented.

Some short term objectives were expressed by the committee:

- Actively work with landowners and appropriate agencies to get more Brownfields assessments and cleanups started.
- Inventory restoration projects and areas suitable for additional projects
- Create wetland restoration mitigation bank

Permitting for any activity around Humboldt Bay at present is very difficult and expensive undertaking and is perceived as an impediment to every aspect of commerce and even to restoration. A by-product of work by this committee and levee reconstruction studies described above should be to demonstrate how Humboldt Bay can be systematically restored, infrastructure can be protected and some prudent development can take place. The committee would also consider needs for zoning changes related to commercial as well as bay conservation and development opportunities. Planning scenarios should include recreational infrastructure development like trails and water trails that are also considered as part of mitigation.

Action

1. Discuss committee formation or assignment option with the Harbor Commission, staff and potential cooperating agencies and stakeholders.
2. Harbor Commission makes determination of committee structure
3. Recommend assigning staff to Humboldt Bay-wide planning effort
4. Solicit cross participation with cooperating agencies on Geographic Information System (GIS) to supply data layers and tools for analysis to support the committee
5. The final report of the committee would be a comprehensive approach to bay conservation and development
6. Obtain MOU with all participating agencies to recognize the Harbor District's role in screening and coordinating permitting
7. Explore means to fund additional Harbor District staff to reduce the burden on individual permit applicants and to help increase efficiency in supplying data to and assisting regulatory agencies.

V. Improve Recreational Infrastructure and Opportunities that Promote Community Health and Boost Economic Development Related to Tourism

The forums on recreation and economic development show substantial overlap and potential for synergy. The five activities considered under this category are water trails, land based multi-modal trails (hiking, biking, motorized wheel chair, etc.), the historic THS museum and railroad, recreational access for motor boats and other water sports and making the Maritime Expo and Paddlefest an annual event. All these activities will enhance community health and/or quality of life and they would all increase potential for tourism. Tourism is not considered as a separate cluster here because the overlap with this category encompasses quite a bit of what the Harbor District might do in this realm.

Water Trails: The Redwood Community Action Agency has successfully completed planning phases of the water trail project with assistance from Harbor District. Staff can work cooperatively with interest groups and other agencies to seek out means to complete water trails,

including acquisition of grant funds for access locations with kiosks and water trail markers that could be buoys or poles.

Multi-Modal Trail Development: The Commission needs to engage in internal discussions, but also with other agencies and entities, over who will take the lead on trail development when opportunities arise. It has been determined by HCAOG that some of the best potential trail routes around Humboldt Bay are along the North Coast Railroad Authorities right of way. The NCRA is in a weak financial condition and prospects for business in Humboldt County appear to be virtually non-existent. Therefore, the Harbor District should consider encouraging and/or engaging other entities that might assume the management and preservation of the right of way for a multitude of uses until the train can return. Additional potential right of way managers and trail development entities are Humboldt County, HCOAG, the Harbor District and CalTrans.

Historic Museum and Railroad: The Timber Heritage Society has been working on trying to establish a museum and a working historic railroad since 1977. They have some cash reserves and a significant amount of railroad and logging artifacts, some of which are housed at the Samoa Roundhouse on Harbor District property adjacent to the Redwood Dock. While the Harbor District has been supportive of the THS in general, the THS is a non-profit organization that must take the lead on updating their business plan, identifying viable opportunities and pursuing funding. The vision of the THS was shared with the Economic Development Committee. Questions raised by the committee touched on the length of the line associated with a museum, the potential of acquiring funding for capital and start up costs, cost of maintenance and finding a price level for riding the train that maximizes riders and helps the venture break even.

Recreational Access for Motor Boats, Surfers and Wind Surfers: The Economic Development Committee touched on the need to improve conditions at Harbor District facilities and those elsewhere around Humboldt Bay operated by other entities. Recreational anglers and boaters identified the need for new and improved boat ramp facilities and a new fish cleaning station at Woodley Island.

Representatives of Surfrider called for consideration of building showers at favorite points of entry for surfing and wind surfing. Additionally there is a need for devices suitable for disposing of dog manure (doggie-pots), since the surfers and the public have dogs that create a nuisance at these same locations.

Maritime Expo and Paddlefest: Boaters and people involved in promotion of eco-tourism stressed the need to revive the Maritime Expo, which has been combined with Paddlefest in recent years. In addition to bringing thousands of local residents down to the Humboldt Bay, this event could become a tourist draw in itself like the Kinetic Sculpture race, the Oyster Fest and the Jazz Festival. Since the Harbor District budget may not allow outlay of thousands of dollars, the event might need to be scaled back. However, several local boating and angling groups might be able to supply quite a bit of energy and structured activities that could help the event succeed without unduly taxing Harbor District staff.

Action

1. Create a committee of interested partners to provide guidance and seek funding to complete water trails and boat launches to further promote access to Humboldt Bay as a paddling and boating destination.
2. Commission should engage in internal discussion as well as with other potential trail development and management agencies to determine the most logical entity to take the lead for development and maintenance of a bay side trail system.
3. Harbor District should participate in regional discussion and solution to the problems and opportunities related to the railroad with an aim towards preserving the publicly owned right of way to be managed in the most feasible, best and highest use with an eye to the future that includes trails and railroad options.
4. Harbor District should continue with plans to replace Woodley Island fish cleaning station.
5. Work with City of Eureka, U.S. Fish and Wildlife and other entities to keep boating access safe around Humboldt Bay.
6. Work with Surfrider and other groups to identify and acquire grants for showers and doggie-pots to improve beach and bay access.
7. Help gage boating, angling and community groups and agency interest in helping pull off a scaled down Maritime Expo/Paddlefest and offer use of Woodley Island facilities.

VI. Maintain Sport and Commercial Fishing Access and Promote Increase of Sustainable Fishing Jobs

The fisheries and aquaculture forum touched on the work of the North Coast Local Interest Marine Protected Area (MPA) Workgroup formed under Harbor District authority. This group was convened to assist regional response to the Marine Life Protection Act Initiative (MLPAI) and has been formalized through a Memorandum of Agreement (MOA) between all North Coast counties, coastal cities, harbor and related special districts and some tribes. There was support for the strategy of making sure that the MLPAI process is scientifically sound and not economically injurious to North Coast communities and taking appropriate opposing action if necessary.

The group forming the MOA may provide a basis for becoming co-managers of North Coast near shore fisheries resources that will build on the current collaborative fisheries program currently being lead by the Harbor District. The monitoring budget associated with the North Coast MLPAI is projected to be \$4 million and part of these funds could set up monitoring for adaptive management using the Harbor District to coordinate and administer the project.

Data from this effort can not only be used for MLPA monitoring, but would also be suitable for sharing with the Pacific Fisheries Management Council in hopes of allowing more extended rockfish seasons. The season extension would be based on demonstrating that fish stocks thought to be at low ebb, such as the yellow-eye and canary rockfish, were actually robust and capable of sustaining additional fishing pressure.

Potential also exists for the MOA formed group to petition for consideration of community catch shares as opposed to individual transferable quotas (ITQs). The latter is a management system where trawl fisheries are given a substantial amount of catch quotas based on past catch rates. Trawl fisheries tend to have more by-catch impacts than directed hook and line fisheries and less

economic benefit to the community because of fewer boat captains. Fishing jobs on the North Coast once numbered as high as 2000 but have now fallen to fewer than 400. Selective fisheries like use of long lines for black cod or sable fish could be the basis of re-expanding sustainable fishing jobs.

Action

1. Continue action through North Coast MPA Oversight Committee to guide sustainable MPA design that is science based and has acceptable economic impacts
2. Pursue grants and contracts that assist the Harbor District in helping the governments and Tribes of the North Coast region become co-managers of near shore fisheries
3. Perform adaptive management to gauge success of MLPA program
4. Share information and work with the PFMC with the objective of extending fishing seasons in ports like Shelter Cover and Fort Bragg if supported by sound, scientific data
5. Use the MOA formed committee to get community catch shares approach to fish management as opposed to one heavily reliant on ITQs so that more fishing jobs can be established and a new generation of fishermen brought into the industry.

VII. Repair and Modify Levees to Protect Against Sea Level Rise While Restoring Humboldt Bay's Ecology and Productivity

The Harbor District has jurisdiction of tidelands extending to the MHHW level of the levees around Humboldt Bay. Many levees were built over 100 years ago most of which are in moderate to extreme disrepair. Even so, it is difficult to get a permit to repair or even maintain them. Repair most often comes when sections of levees periodically wash out in large storm events triggering “emergency” action. Funding for repairs usually comes from the Federal Emergency Management Agency (FEMA) and emergency permits for repair are granted. The Harbor District has played a mostly passive role in this process to protect the dairy lands, cities, highways, and other infrastructure around the bay. With so many miles of levee in need of repairs and the adjacent opportunities for protection of business and ecological restoration it is recommended the District play a more active role in the development of levee policy and project implementation.

Strategic movement or removal of levees should also be considered to reduce construction and maintenance costs and increase ecological services.

Sea level rise related to climate change has been verified and the City of Arcata recently used FEMA funds to rebuild the levee that protects their waste water treatment facility and marsh system. They chose a height of nine feet to forestall sea level rise and anticipate that that will suffice until at least 2030. Highway 101 is at an elevation of seven feet above sea level and storms in 1997 and 2006 caused partial inundation. Discussions at this year Humboldt Bay Symposium indicate that clean sediment from the bay entrance channel could be deposited around the base of reconstructed levees so that salt marsh is increased as infrastructure is protected. The Harbor District should begin planning immediately for undertaking this activity by using the consulting budget already allocated to Conservation Officer Dr. Chad Roberts with the intent of identifying a strategy and grant or contract targets for further planning and implementation. This job could take 10-20 years and costs will be in the many millions of dollars. Any recommended activity should include an adequate administrative overhead

component to compensate for district staff time and incidentals which has the potential to generate revenue for the district.

By taking a holistic approach to restoration, the Harbor District can help with permitting for these other restoration projects and promote to our environmental community and the Coastal Commission that our approach will have a net benefit to Humboldt Bay's health. Restored levees can also provide ancillary benefits such as trails and trains and additional access to the Bay.

Action

1. Conservation Officer does early planning work to frame strategy and define how levee improvements for sea level rise and salt marsh restoration could be funded.
2. Apply for study grants from Coastal Conservancy and other sources.
3. Complete feasibility study, engineering and environmental assessment documents for a comprehensive approach to both the levee improvement and restoration projects.
4. Apply for construction grants or contract with other agencies that have funds.
5. Improve levee system and complete restoration projects.